CLAIMS

1. (currently amended) Method of assessing the state of Alzheimer's disease in a subject comprising detecting a polypeptide having a molecular mass ~~one or more polypeptides selected from the group of polypeptides having, molecular masses~~ of 4824±20 Da, the molecular mass being observable by SELDI-TOF-MS using a strong anion exchange array~~, of 7691±20 Da, of 11787±20 Da, of 11988±20 Da, of 13416±20 Da, of 4769±20 Da, of 6958±20 Da, of 6991±20 Da, of 13412±20 Da, of 13787±20 Da, of 17276±20 Da, of 40437±20 Da, of 6895±20 Da, of 6928±20 Da, of 7691±20 Da, of 7769±20 Da, of 7934±20 Da, of 5082±20 Da, of 6267±20 Da, of 6518±20 Da, of 7274.2±0 Da, and of 8209±20 Da~~.

2. (withdrawn) Method of claim 1 in which at least 2, or 3, or 4, or 5, or 10 or all polypeptides of said group of peptides are detected.

3. (currently amended) Method of assessing the state of Alzheimer's disease in a subject comprising detecting a polypeptide of ~~one or more polypeptides comprising the sequence of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16 and/or~~ SEQ ID NO:17.

4. (currently amended) Method of assessing the state of Alzheimer's disease in a subject comprising detecting ~~one or more polypeptides selected from the group of polypeptides consisting of~~

~~i) human cystatin C,~~

~~ii) human beta-2-microglobulin,~~

~~iii) human myoglobin (new variant)~~

~~iv) neurosecretory protein VGF,~~

~~v) a fragment of at least 5 amino acids of human cystatin C,~~

~~vi) a fragment of at least 5 amino acids of human beta-2-microglobulin,~~

~~vii) a fragment of at least 5 amino acids of human myoglobin (new variant), and~~

~~viii) a fragment of~~ at least 5 contiguous amino acids of the polypeptide of SEQ ID NO:17 ~~neurosecretory protein VGF~~.

5. (original) Method of investigating the progression of Alzheimer's disease in a subject characterized in that a method of any of claims 1 to 4 is performed with at least two distinct samples drawn from the same subject.

6. (canceled)

7. (previously presented) Method of claim 1, wherein specific antibodies or antibodies recognizing said polypeptides are used for detection of said polypeptide(s).

8. (previously presented) Method of claim 1, wherein detection is in a sample comprising CSF, blood, serum, plasma, urine, seminal plasma, nipple fluid, and/or cell extracts of said patient.

9. (withdrawn) A kit comprising polypeptides having a molecular mass of 4824±20 Da, of 7691±20 Da, of 11787±20 Da, of 11988±20 Da, of 13416±20 Da, of 4769±20 Da, of 6958±20 Da, of 6991±20 Da, of 13412±20 Da, of 13787±20 Da, of 17276±20 Da, of 40437±20 Da, of 6895±20 Da, of 6928±20 Da, of 7691±20 Da, of 7769±20 Da, of 7934±20 Da, of 5082±20 Da, of 6267±20 Da, of 6518±20 Da, of 7274±20 Da, and/or of 8209±20 Da.

10. (withdrawn) A kit comprising a fragment of at least 5 amino acids of human cystatin C, a fragment of at least 5 amino acids of human beta-2-microglobulin, a fragment of at least 5 amino acids of human myoglobin (new variant), and a fragment of at least 5 amino acids of neurosecretory protein VGF.

11. (previously presented) Method of claim 3, wherein detection of said polypeptide is by SELDI-TOF-MS.

12. (previously presented) Method of claim 3, wherein specific antibodies or antibodies recognizing said polypeptides are used for detection of said polypeptides.

13. (previously presented) Method of claim 3, wherein detection is in a sample comprising CSF, blood, serum, plasma, urine, seminal plasma, nipple fluid, and/or cell extracts of said patient.

14. (previously presented) Method of claim 4, wherein detection of said polypeptide is by SELDI-TOF-MS.

15. (previously presented) Method of claim 4, wherein specific antibodies or antibodies recognizing said polypeptides are used for detection of said polypeptides.

16. (previously presented) Method of claim 4, wherein detection is in a sample comprising CSF, blood, serum, plasma, urine, seminal plasma, nipple fluid, and/or cell extracts of said patient.